(54) Title: IMPROVED RESOURCE ALLOCATION TECHNIQUE
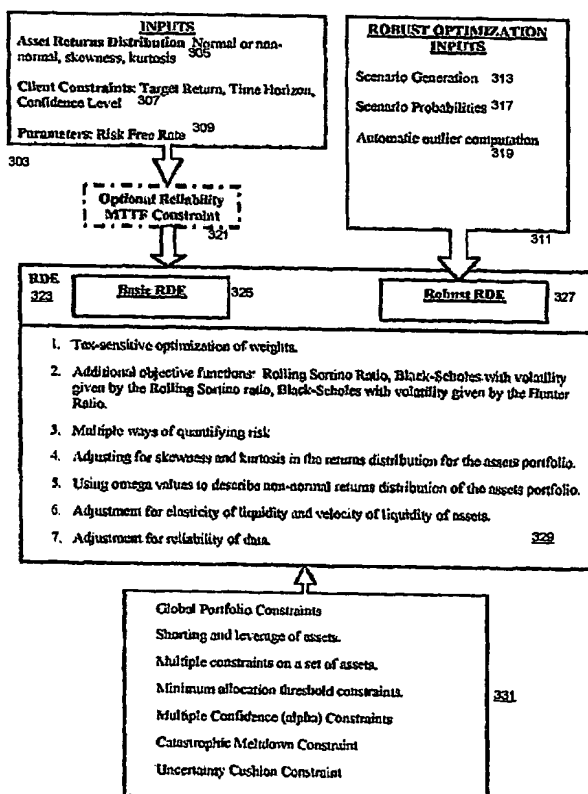
(57) Abstract: Resource allocation techniques that include a technique for determining the probability that at least one asset in a set of assets will not achieve its desired return during a period of time. The technique is used to select reliable sets of assets for optimization. Also included are techniques for robust optimization of a set of assets. In these techniques, a user defines or selects scenarios that model investment conditions including normal and/or extreme conditions. The set of assets is optimized across the scenarios to produce weights for the assets in the set that optimize the worst-case value of the assets. A resource allocation system is disclosed which first selects a reliable set of assets for optimization using the selection technique described above and then optimizes the reliable set of assets. Optimization of the set of assets may involve robust or non-robust optimization, many different kinds of constraints and/or multiple constraints, different objective functions, and different adjustments for the objective functions. Selection of the set of assets and selection of the kind of optimization, of the constraints, of the objective function, and of the adjustments to the objective function is done using a graphical user interface.

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).